

JT600 User Manual

Ver 1.2



Shenzhen joint technology co, ; ltd

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I Preface

All the content in this manual is accurate, however, with the continuous research and development of Joint Technology Co.,Ltd, we might update the operational manual from time to time.

The manual you are reading now is reflecting of present state of art of the products described therein, we have endeavored to give a description that is as complete and clear as possible in order to make it easy for you to use our products. There might be content which is not described in accurate technical expression, with the rapid technology development, we reserve the rights to incorporate technical alterations and developments without separate notice in advance.

You can refer to the latest operation manual and relative documents by visiting www.joint-tracking.com.

Please read those simple guidelines before use, Jointech assured that the products will work properly under normal conditions, the warranty period would be 12 months from the delivery date, the warranty shall not apply to any defect, failure or damage which caused by improper maintenance, repair, alteration.

II Version History

Serial Number	Content	Date
1	Documentation release	2010-12-22
2	Edit the working mode, Add P14,P18 command V1.1	2011-02-26
3	Edit 4.2 Operation Button and 4.3 working mode instruction V1.2	2011-04-26

III Function Table

S/N	Function List
1	SMS and GPRS transmission mode
2	Two-way voice function
3	listen-in function
4	64 Geo-fence support
5	Self Geo-fence
6	6 types of working mode
7	real-time power monitoring
8	GSM and GPS signals detecting
9	Immediate vehicle position query (the unit will reply Google Earth map link)
11	Support remote/PC setup setting
12	Lower power alert, SOS alert, enter and exit geo-fence alert
13	Solar power supply
14	backup batter of 2500mAh
15	SOS help report
16	Solar power working indication
17	flashlight function
18	Mini-USB port, cable(charging/upgrading/configuration)
19	Standby time up to 2 months
20	Vibration detecting
21	RTC

IV Profile and Description

4.1 Profile



4.2 Operation Button

There are 4 buttons, please refer to the following details:

Button	Operation	Function	Conditions
CALL I	Press this button for 3 sec	It will call the first preset VIP number . Note: JT600 will be vibrating if you dial this number successfully.	No incoming call is received
	Press this button once	Answer the coming call	When an incoming call is received
CALL II	Press this button for 3 sec	It will call the second preset VIP number. Note: JT600 will be vibrating if you dial this number successfully.	No incoming call is received
	Press this button once	Answer the coming call	When an incoming call is received
	Press this button twice within 3sec	Self Geo-fence ON Note: JT600 will be vibrating if you set this successfully. and there is a message which informs you the self geo-fence latitude, longitude and radius .	No incoming call is received. and self Geo-fence off
Power	Press this button for 3 sec	Power off. Note: When JT600 is in GPRS or SMS timing mode, Press power button for 3 sec , JT600 will be waken up.	Power on
	Press this button once	Hang up the call	When a call come or in communication or Dialing out
		Power On	Power off And inserted sim card
SOS	Press this	Send SOS alert to VIP numbers	Normal. Power on

	button for 3 sec	Note: JT600 will be vibrating if SOS alert was sent successfully.	
	Press this button once	<p>press the SOS button once, the LED indication of SOS would be changed in turn, as below:</p> <p>On: flashlight</p> <p>Flash: the led would flash according to the international SOS standard</p> <p>Off: SOS led is off</p>	Normal. Power on

(Table 1)

4.3 Working mode

Working mode	Wakeup condition	GSM Module while sleeping	GPS Module while sleeping	Note
SMS Standby	Press any button/coming call/SMS	Sleep	Power off	All of the operation can be responded. JT600 will be always online.
SMS Timing	Data upload interval timer	Power off	Power off	After 1 data was sent by JT600 according to the preset interval, then it will get into sleeping mode immediately, under this mode, JT600 can't dial any phone number and receive any SMS, it will respond only when the user pressed the power button for 3 sec.
SMS Vibration	Vibration	Power off	Power off	When JT600 was vibrated, it will wake up and get into

				vibration mode in 10 minutes if there is no any operation
GPRS Standby	Works all the time	Sleep	Power on	All of the operation can be responded.JT600 will be always online.
GPRS Timing	Data upload interval timer	Power off	Power Off	After 1 data was sent by JT600 according to the preset interval, then it will get into sleeping mode immediately, under this mode, JT600 can't dial any phone number and receive any SMS, it will respond only when the user pressed the power button for 3 sec.
GPRS Vibration	Vibration	Power off	Power on	When JT600 was vibrated, it will wake up and get into vibration mode in 10 minutes if there is no any operation

(Table 2)

Note:

GSM standby mode: GSM is on the line, the unit can receive phone call and SMS command.

4.4 Voice communication

JT600 has the two-way voice communication, which can dial preset phone numbers and receive phone call as well. When a call coming, the unit will ring, press CALL I button once to receive the call.

Press CALL I or CALL II button for 3 seconds to call the preset VIP number.

The phone call can also be hung up by pressing power button once.

4.5 LED Indication

Please refer to the LED status under different working mode:

ID	Type	Color	Indication
1	GSM LED	green	When there is GSM signal, the LED will flash every 5 seconds; when there is no GSM signal, the led will flash every 1 second.
2	GPS LED	blue	When the GPS signal is valid, the LED will flash every 10 seconds, When the GPS signal is invalid, the LED flash every 3 seconds;the LED won't flash when the module was broken.
3	Power LED	yellow	When the battery is low, the LED will flash every 3 seconds
4	Flashlight LED	white	Flashlight, LED can be on constantly(maximum 60s/time) or flash in SOS mode
5	Charging LED	red/green	When the battery is charging, the LED would be red, when the charge finished successfully, the LED would be green
6	Solar panel working LED	red	When the Solar panel is working, the LED would be red, when the charge finished successfully, the LED would be green

(Table 3)

V Configuration and Using

5.1 PC Setup software

Notice: Before you configure JT600, Please read the manual. [《JT600 Mini-USB Cable Driver InstallationV1.2.pdf》](#)

5.1.1 Get started with this software

COM

COM Port: 4

Baud Rate: 9600

Open[O]

Show Msg From

Choose/Input Com Port number ,and then Click “Open “button

Click “Show Msg From” ,There will be pop-up window. It is used to check the commands what you have sent.

5.1.2 Version/Center Number/GPRS Network

JT600 Assistant

COM

COM Port: COM1

Baud Rate: 9600

Open[O]

Basic information

ID: 3101207215

Another Name:

GSM: [Signal Strength]

GPS: [Signal Strength]

Battery: [Battery Level]

Save[S]

Load[L]

Default[D]

Version/Center Number/GPRS Network

Working Mode/Data Uploading

Self Geo-fence/Geo-fence

Version

Firmware Ver: [Read]

SMS Center Number

Center Number: [Set] [Read]

VIP Numbers

1: [Set] [Read]

2: [Set] [Read]

3: [Set] [Read]

4: [Set] [Read]

5: [Set] [Read]

GPRS network parameters

IP address: 211.154.XXX.XX

Port: 8888

APN: CMNET

[Set] [Read]

APN Username and Password

Username: [Set] [Read]

Password: [Set] [Read]

Low Battery Alert

Battery: 20 % [Set] [Read]

Volume

Volume: [Set] [Read]

Another Name

Name: [Set] [Read]

Time Difference

Time difference: 480 minute(s) [Set] [Read]

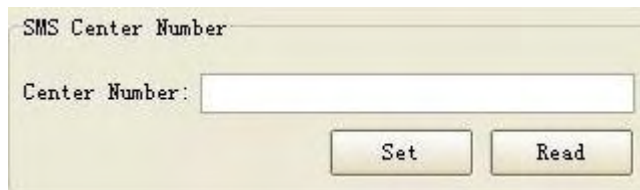
5.1.2.1 Read Firmware Version

Version

Firmware Ver: [Read]

Click “Read” button, you will get the firmware version.

5.1.2.2 SMS Center Number



SMS Center Number(Primary SMS number) is used for getting the **alert message/position data/reply message** by SMS.

The difference between SMS center Number and VIP number is that SMS Center Number can get location data.

Note:

- 1) If the working mode is GPRS mode(standby/timing/vibration), SMS center number only be used for sending short message command and receiving the reply of short message command .
- 2) If the working mode is SMS mode(standby/timing/vibration), SMS center number is used for getting the position data/alert message/reply message.

5.1.2.3 VIP Numbers



VIP number is used to get **the alert message /reply message** from JT600.

CALL I : Set the index 1 number

CALL II : Set the index 2 number

Note:

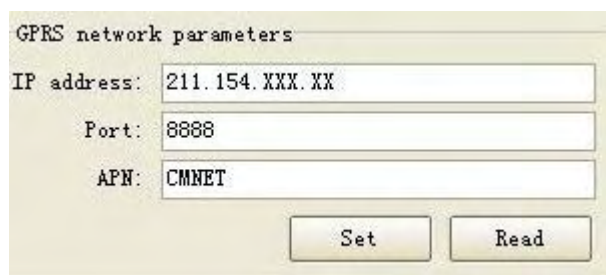


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 Website: www.joint-tracking.com Add: 5th Floor, 404 Bldg, Shangbu Industry Zone, Futian District, Shenzhen, P.R.C.

The first time you sent short message command to JT600, this cell phone number would be preset to CALL I number.

Only when the cell phone number is one of the VIP numbers and SMS center number, Can this number send short message command to JT600. Otherwise, the short message command would be omitted by JT600.

5.1.2.4 GPRS network parameters



GPRS network parameters

IP address:

Port:

APN:

Refer to the default information. It's just a example. APN : access point name at local. CMNET is in china.

And Please note:

It is used for monitoring in control center. Only you set the working mode (GPRS mode), These parameters will be activated.

5.1.2.5 APN username and password



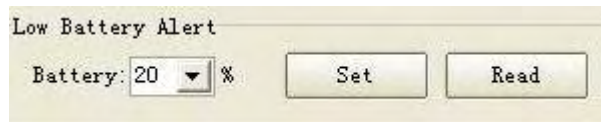
APN Username and Password

Username:

Password:

Please ask the SIM card service provider to check if it has APN username and password.

5.1.2.6 Low Battery alert



Low Battery Alert

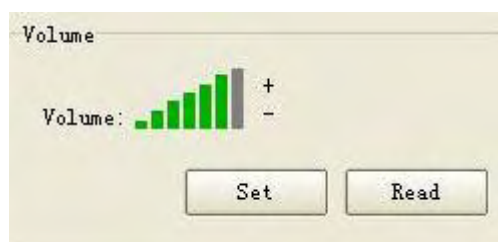
Battery: 20 %

Set Read

Input /select this value, when the power percent of the battery is low than this. There will be a Low Battery alert. It alerts twice.

If JT600 is in GPRS mode, It will alert after 3 seconds .after about 20 minutes, It will alert again.

5.1.2.7 Adjust Voice Call volume



Volume

Volume: [Bar Graph]

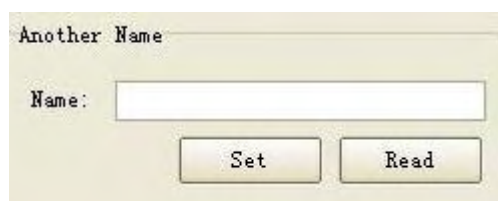
+

-

Set Read

Click the "+", "-" to adjust the ring volume.

5.1.2.8 Another Name



Another Name

Name: [Text Field]

Set Read

If you didn't set this, when you got a SMS reply from JT600.It just shows the unique ID.

5.1.2.9 Time difference



Time Difference

Time difference: 480 minute(s)

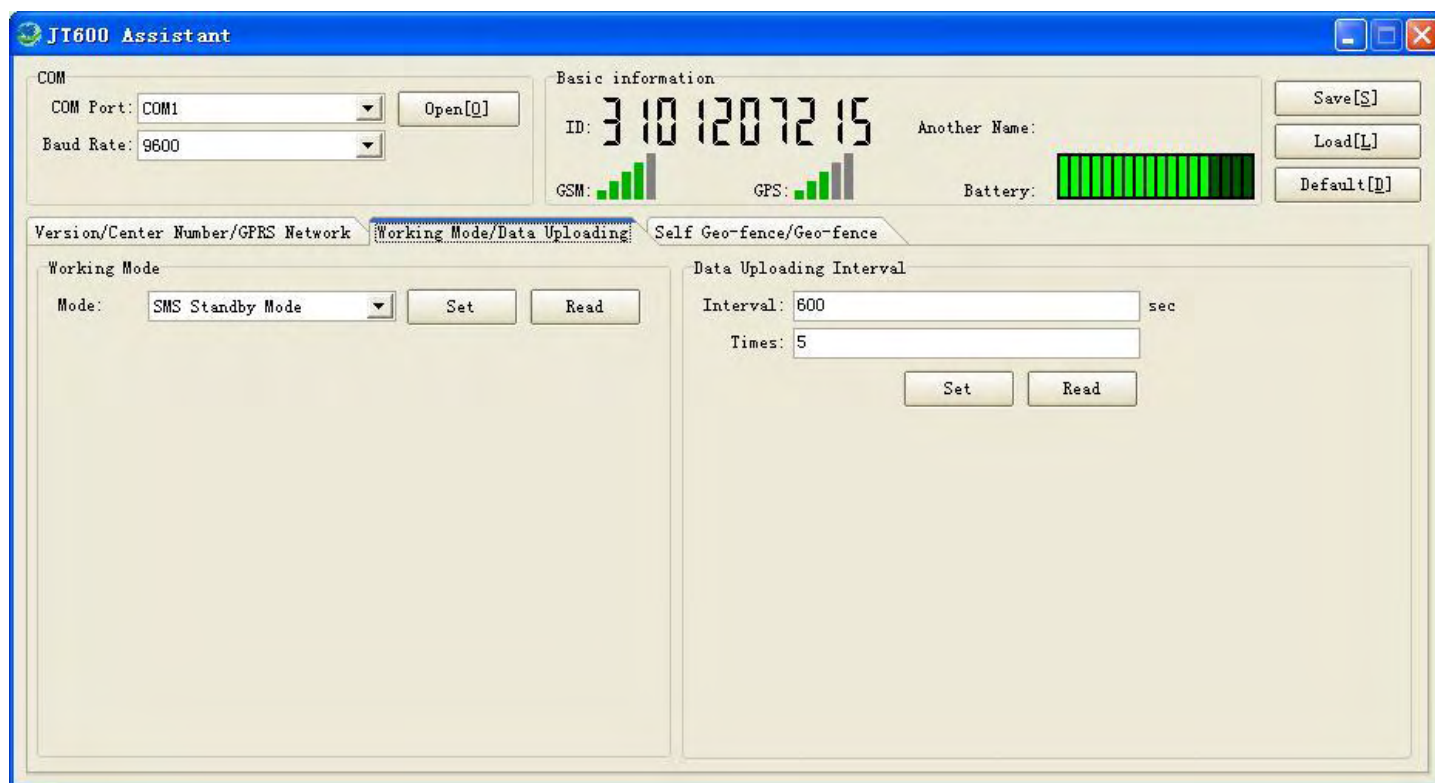
Set Read

480 is a example in china.

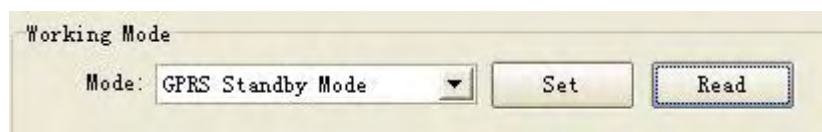
JT600 outputs Greenwich time. So If you didn't set time difference. The SMS message 's time is not correct.

If it's ahead of Greenwich time. You can input a negative value. Like : -60

5.1.3 Working Mode/Data Uploading



5.1.3.1 Working Mode



JT600 supports six modes. There are GPRS (standby /Vibration/Timing mode) and SMS(standby /Vibration/Timing mode).

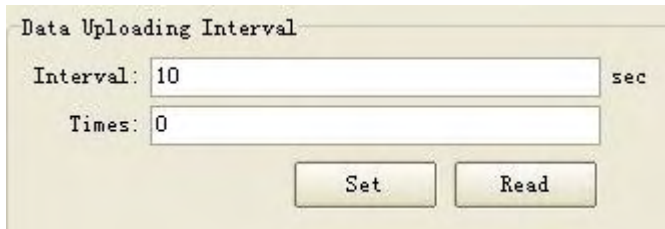
The detailed information about the six modes ,Refer to the section: 4.3Working mode.

Default working mode is GRPS standby.

Note:

Because JT600 would be reboot If you set some one mode. So sometimes, You couldn't get the prompt message("operation success")

5.1.3.2 Data Uploading Interval



Example:

10 seconds It means uploading position data every 10 sec.

0 it means uploading continuously. If you input 20 ,it means uploading 20 pieces of position data via SMS or GPRS, and then stop data transmitting.

Before set the data uploading interval ,Please check the working mode you selected.

If working mode is GPRS standby/vibration/timing ,Data would be sent to the monitor center via GPRS.

If working mode is SMS standby/vibration/timing , Data would be sent to the SMS center via SMS.

Note:

If data is sent via SMS, We suggest the time interval should be more than 120 sec. and It's necessary to set the SMS center number (primary SMS number) If you want to get position data by SMS.

5.1.4 Self Geo-fence/Geo-fence

5.1.4.1 Self Geo-fence

Self Geo-fence

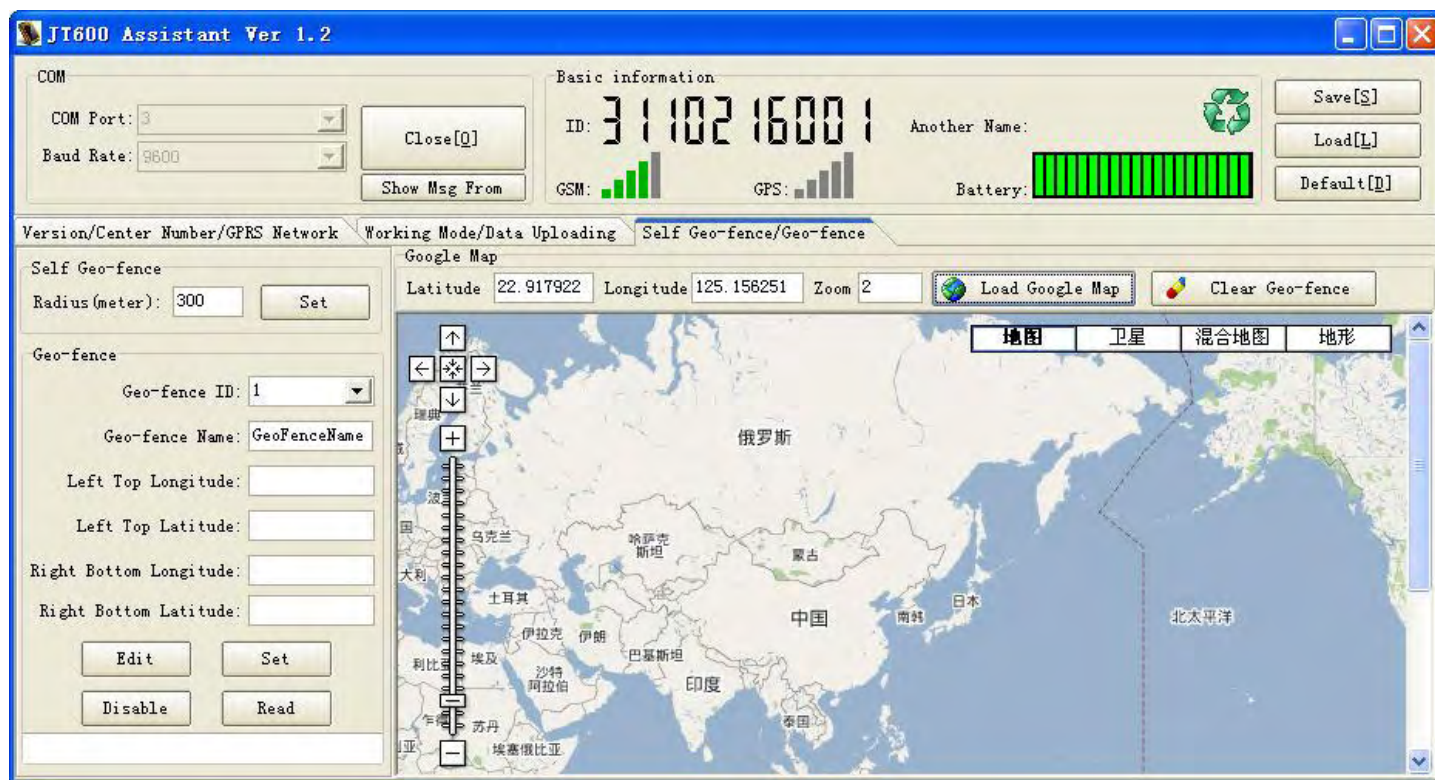
Radius (meter):

Self Geo-fence (only supported by GPRS standby and GPRS vibration mode)

Only when the GPS signal is valid, then can you set this .and A circular geo-fence will be generated according to the current position, the radius is 300 meters.

5.1.4.2 Geo-fence

Click “Load Google Map”, and You will see the Google map.





The image shows a software interface for configuring a Geo-fence. It has a title bar 'Geo-fence'. Below it, there is a 'Geo-fence ID' dropdown menu with '1' selected. Next to it is a 'Geo-fence Name' text box containing 'GeoFenceName'. Below these are four text boxes for coordinates: 'Left Top Longitude', 'Left Top Latitude', 'Right Bottom Longitude', and 'Right Bottom Latitude'. At the bottom, there are four buttons: 'Edit', 'Set', 'Disable', and 'Read'.

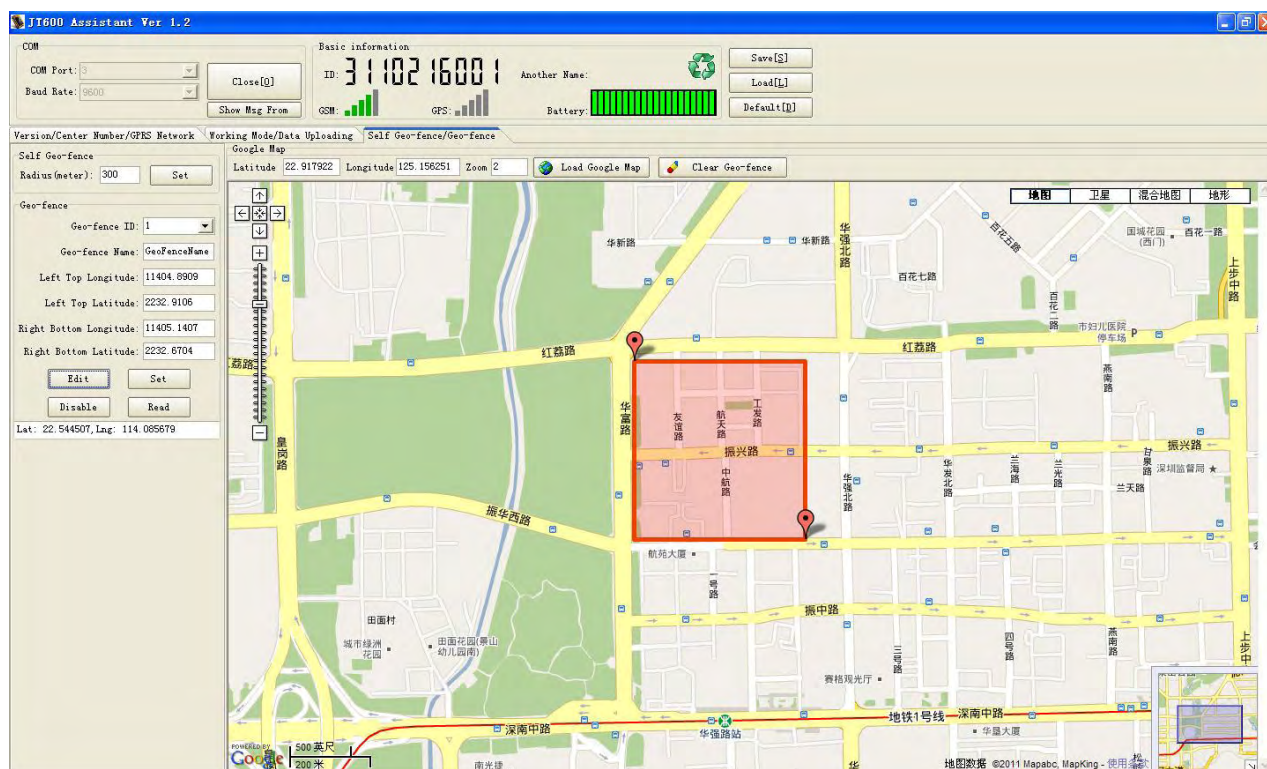
JT600 supports 64 fences.

Click “Edit” button, You can get longitude and latitude from the Google map

Click “Set” button, and Set this Geo-fence.

Click “Disable” button, You can disable this Geo-fence .

Click “Read” button, You can get the Geo-fence information what you had set.



5.2 SMS Setting and Using

5.2.1 SMS Command Framework and List

No.	name	Length (bytes)	Note
1	Packet head	1	Fixed "("
2	command	3	Such as P03 ect...
3	separative sign	1	"," mark
4	parameter	N	"," to separate the various parameters
5	Packet end	1)

Command name	Description	Example
--------------	-------------	---------

P01	Enquire the firmware version	(P01)
P02	Enquire current position	(P02)
P03	Enquire/Set SMS center number	<p>(P03,1,13919192020) / (P03,0)</p> <p>Parameter[1]: 1 means setting ,0 means enquiring</p> <p>Parameter[2]: 13919192020 means SMS center number. Don't be more than 15 digital numbers.</p>
P04	Enquire/Set Data uploading interval	<p>(P04,1,60,2) / (P04,1,120,0) / (P04,0)</p> <p>Parameter[1]: 1 means setting, 0 means enquiring</p> <p>Parameter[2]: 60 means 60 seconds ,uploading every 60 seconds</p> <p>Parameter[3]: 2 means uploading 2 times and then stops uploading data. If you input 0 ,It will upload data constantly via GPRS or SMS. Whether uploading via GPRS or SMS ,please refer to the P07 command.</p>
P05	Enquire/Set GPRS network parameters(IP address, Port)	<p>(P05,1,211.154.XXX.XXX,8000,CMNET,0) / (P05,0)</p> <p>Parameter[1]: 1 means setting, 0 means enquiring</p> <p>Parameter[2]: 211.154.XXX.XXX means IP address</p> <p>Parameter[3]: 8000 means TCP port</p> <p>Parameter[4]: CMNET means APN name .access point name at local. CMNET is example in china.</p> <p>Parameter[5]: 0 means the Data transmission is TCP. 1 indicates UDP</p>
P06	Enquire/Set APN username and	<p>(P06,1,user,pass)</p> <p>Parameter[1]: 1 means setting, 0 means enquiring</p>

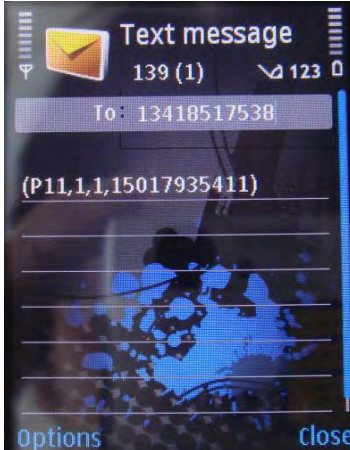
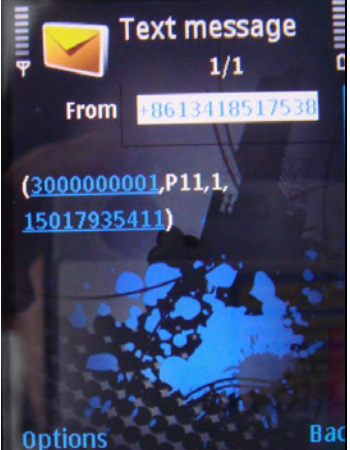
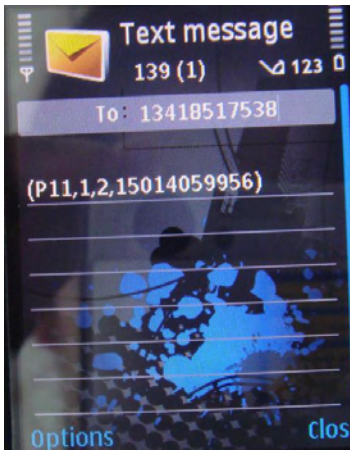
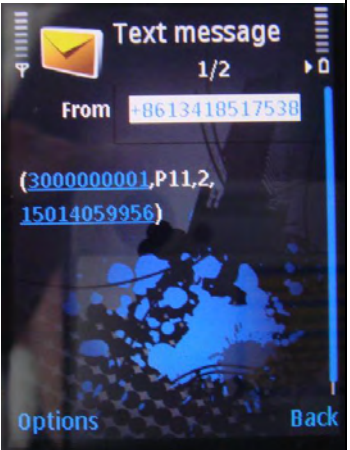
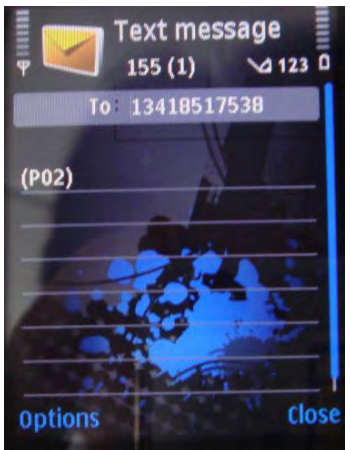
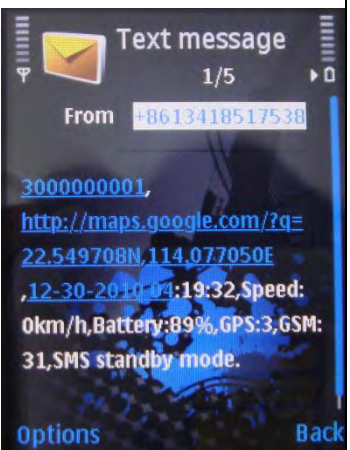
	password	<p>Parameter[2]: user means APN username. User is a example.</p> <p>Parameter[3]: pass means APN password. Pass is a example.</p>
P07	Enquire/Set Working mode	<p>(P07,1,4) / (P07,0)</p> <p>Parameter[1]: 1 means setting, 0 means enquiring</p> <p>Parameter[2]: 4 means GPRS Standby mode. There are six modes.</p> <ul style="list-style-type: none"> 1 SMS Standby mode 2 SMS Timing mode 3 SMS Vibration mode 4 GPRS Standby mode 5 GPRS Timing mode 6 GPRS Vibration mode
P08	Enquire/Set Geo-fence	<p>(P08,1,1,11323.1234,2312.2321,11326.4312,2308.1233,area 1)</p> <p>Parameter[1]: 1 means setting, 0 means enquiring</p> <p>Parameter[2]: 1 means Geo-fence ID.JT600 supports 64 fences.</p> <p>Parameter[3]: 11323.1234,2312.2321,11326.4312,2308.1233 means 11323.1234 left top longitude, 2312.2321 left top latitude, 11326.4312 right bottom longitude, 2308.1233 right bottom longitude.</p> <p>It's a rectangular region. Please set Geo-fence by JT600 Assistant software.</p> <p>Parameter[4]: area 1 means Geo-fence name.</p>

P09	Enquire/Set Self Geo-fence	<p>(P09,1,300)</p> <p>Parameter[1]: 1 means setting, 0 means enquiring</p> <p>Parameter[2]: 300 means 300 meters.</p> <p>Self Geo-fence (only supported by GPRS standby/GPRS vibration mode)</p> <p>Only when the GPS signal is valid, then can you set this .and A circular geo-fence will be generated according to the current position, the radius is 300 meters.</p>
P10	Enquire/Set Low battery alert	<p>(P10,1,20)</p> <p>Parameter[1]: 1 means setting, 0 means enquiring</p> <p>Parameter[2]: 20 means 20%. when the power percent of the battery is low than this. There would be a Low Battery alert.</p>
P11	Enquire/Set VIP numbers	<p>(P11,1,1,13910102345) / (P11,0,5)</p> <p>Parameter[1]: 1 means setting, 0 means enquiring</p> <p>Parameter[2]: 1 means the first VIP number(CALL I).JT600 supports 5 VIP numbers.</p> <p>Parameter[3]: 13910102345 means Cell phone number</p>
P12	Enquire/Set time difference	<p>(P12,1,480) / (P12,0,480) / (P12,0)</p> <p>Parameter[1]: 1 means setting, 0 means enquiring</p> <p>Parameter[2]: 480 means 60*8=480 minutes. 480 is example.</p> <p>JT600 outputs Greenwich time. So we need to adjust it to your local time.</p>

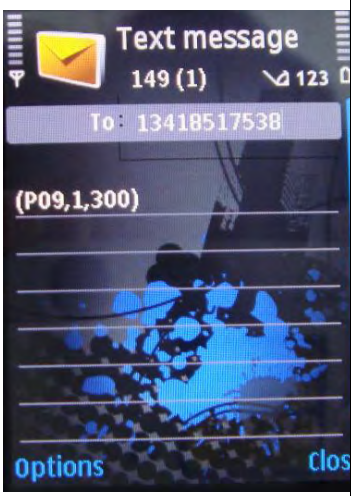

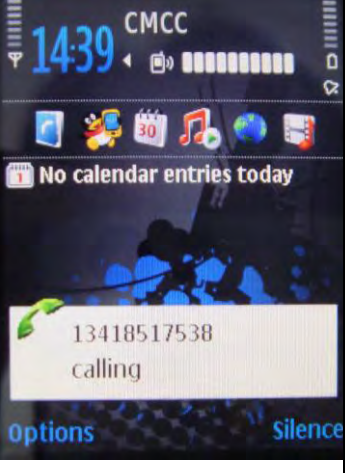
P13	Require SOS LED flashing	<p>(P13,1,1) / (P13,1,0)</p> <p>Parameter[1]: 1 means setting, 0 means enquiring</p> <p>Parameter[2]: 1 means open the SOS LED .0 means close the SOS LED.</p>
P14	Set ring volume	<p>(P14,1,5) / (P14,0,5)</p> <p>Parameter[1]: 1 means setting, 0 means enquiring</p> <p>Parameter[2]: 5 from 1 to 7. 1 indicates minimum volume. 7 indicates maximum volume.</p>
P15	Require Listen-in remotely	<p>(P15,13919192020)</p> <p>Parameter[1]: 13919192020 means cell phone number. After you send this command ,JT600 will call this number.</p>
P16	Enquire current battery	(P16)
P17	Enquire/Set another name	<p>(P17,1,jointech)</p> <p>Parameter[1]: 1 means setting, 0 means enquiring</p> <p>Parameter[2]: jointech means another name. jointech is a example.</p>

5.2.2 Short Message Command Example

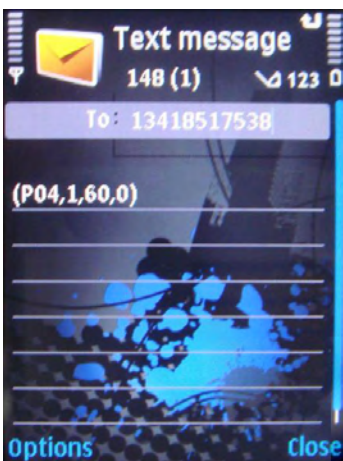
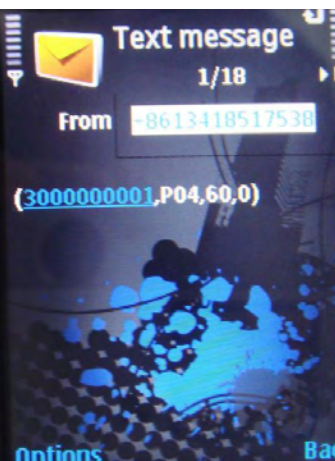
Feature	Command format example	Send Short message command via cell phone	Reply message from JT600
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Set CALL I numb er	(P11,1,1,15017935411)		
Set CALL II number	(P11,1,2,15014059956)		
Enquire current position	(P02)		

Set time difference	(P12,1,480) <i>//8*60=480 minutes in china</i>		
Set Low battery alert	(P10,1,20) <i>//20%</i>		
Set Another name	(P17,1,John)		

Set Self Geo-fence	(P09,1,300) //300 meter		(only supported by GPRS standby and GPRS vibration mode)
Listen-in remotely	(P15,15017935411)	 	
The next commands are used for real-time monitoring setting. Data transmission via GPRS.			
Set working mode	(P07,1,4) //GPRS standby mode		No reply

Set SMS center number	(P03,1,13504562154) //primary SMS number		
Set IP address and APN parameter	(P05,1,211.154.136.219,8888,cmnet,0) //cmnet: access point name in china		
Set APN account	(P06,1,user,pass) //if there is no APN account, no need to send this command		

Set Data uploading interval for SMS or GPRS	(P04,1,60,0) //upload every 60 seconds continuously		
---	---	--	---

VI Product Specification

6.1 Physical Parameters and Environmental

size	unit : 96mm * 51mm * 22mm , bake up battery
weight	unit : 80g , backup battery: 50g
housing	plastic
Working temperature	-25~+70℃
Default battery capacity	1800mAh
Back-up battery capacity	2500mAh

6.2 GPS module parameter

Chipset	SiRF Star III
Frequency	L1,1575.42MHz
Code	C/A Code
Protocol	NMEA 0183 V2.2 Default:GGA,GSA,GSV,RMC Support:VTG,GLL,ZDA SiRF binary and NMEA Command
Available Baud Rate	4,800 to 57,600 bps adjustable
Channels	20
FLASH	4Mbits
Sensitivity	-159dBm
Cold start	42 seconds,average
Warm start	38 seconds,average
Hot start	1 second,average
Accuracy	Position : 10 meters,2D RMS 5 meters,2DRMS,WAAS enabled Velocity : 0.1m/s Time : 1us synchronized to GPS time
Maximum Altitude	< 18,000 meter
Maximum Velocity	< 515 meter/second
Maximum Acceleration	< 4G
Update Rate	1Hz





DGPS	WAAS, EGNOS, MSAS
Datum	WGS-84


6.3 GSM module parameter

Frequency bands	<p>SIM900</p> <p>Quad-band: GSM 850, EGSM 900, DCS 1800, PCS 1900.</p> <p>The band can be set by AT COMMAND, and default band is EGSM 900 and DCS 1800.</p> <p>Compliant to GSM Phase 2/2+.</p>
GSM class	Small MS
Transmit power	<p>Class 4(2W) at EGSM900 and GSM850</p> <p>Class 1(1W) at DCS1800 and PCS 1900</p>
GPRS connectivity	<p>GPRS multi-slot class 10</p> <p>GPRS mobile station class B</p>
Temperature range	<p>Normal operation : -20~+55°C</p> <p>Restricted operation : -25~+70°C</p>
Data GPRS	<p>GPRS data downlink transfer: max. 85.6 kbps</p> <p>GPRS data uplink transfer: max. 42.8 kbps</p> <p>Coding scheme: CS-1, CS-2, CS-3 and CS-4</p> <p>SIM900 supports the protocols PAP (Password Authentication Protocol) usually used for PPP connections.</p> <p>The SIM900 integrates the TCP/IP protocol.</p> <p>Support Packet Switched Broadcast Control Channel (PBCCH)</p> <p>CSD transmission rates: 2.4, 4.8, 9.6, 14.4 kbps, non-transparent</p> <p>Unstructured Supplementary Services Data (USSD) support</p>
SMS	<p>MT, MO, CB, Text and PDU mode</p> <p>SMS storage: SIM card</p> <p>Support transmission of SMS alternatively over CSD or GPRS. User can</p>

	choose preferred mode.
SIM interface	Supported SIM card: 1.8V ,3V
Audio features	Speech codec modes: Half Rate (ETS 06.20) Full Rate (ETS 06.10) Enhanced Full Rate (ETS 06.50 / 06.60 / 06.80) Echo suppression
External antenna	Connected via 50 Ohm antenna connector or antenna pad.
Two serial interfaces	Serial Port 1 Seven lines on Serial Port Interface Serial Port 1 can be used for CSD FAX, GPRS service and send AT command of controlling module. Serial Port 1 can use multiplexing function, but you can not use the Serial Port 2 at the same time; Autobauding supports baud rate from 1200 bps to 115200bps. Serial port 2 Two lines on Serial Port Interface /TXD and /RXD Serial Port 2 only used for transmitting AT command.
Phonebook management	Supported phonebook types: SM, FD, LD, RC, ON, MC
SIM Application Toolkit	Supports SAT class 3, GSM 11.14 Release 98
Real time clock	Implemented
Timer function	Programmable via AT command
Firmware upgrade	Firmware upgradeable over serial interface

VII Standard package and optional accessories

Item	Accessories name	Unit	Explain	Accessories picture
1	Main body(including 1800mAh battery)	pcs	Standard	
2	Mini-USB charging/configuration cable	pcs	Standard	
3	CD (user manual/ configure software)	pcs	Standard	The latest information can be downloaded from www.joint-tracking.com
4	Charging(directly)	pcs	Optional	
5	Back-up battery (2500mAh)	pcs	Optional	

6	Upgrade cable	pcs	Optional	
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VIII FAQ

1. The default work mode would be GPRS standby mode.
2. The unit can only be powered on whiles SIM card put in. The unit will powered off as soon as the SIM card pulled out.
3. If you connected the upgrade cable with JT600,It would be shutdown. To power on the unit, you have to pull and plug SIM card and press power button once.

IX SAR

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure of measurement known as the Specific Absorption

Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg and the CE is 2.0 W/kg. transmitting at its highest certified power level in all Your Portable GPS Tracker is a radio transmitter and receiver. It is at the highest certified power level, the well below the maximum value. This is power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The FCC has granted an Equipment Authorization for evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID: ZO8JT600.